

APPENDIX B
*Biological Resources -
Species Potential to Occur Tables*

The following plant species are covered by the Habitat Conservation Plan (HCP) and will be addressed in the Environmental Assessment (EA); therefore, they are not included in the table below: San Joaquin Valley Orcutt grass, Hoover's spurge, and spiny-sealed button celery.

The list of special-status plant species potentially occurring in the HCP Permit Area and not covered by the HCP was generated based on the following resources:

- California Natural Diversity Database (CNDDDB) 7-mile query (CDFW 2013)
- California Native Plant Society (CNPS) 9-quad search (CNPS 2012)
- U.S. Fish and Wildlife Service (Service) Species List, based on database search of 15 quadrangle maps (Service 2013)
- Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (Service 2005)
- Recovery Plan for Upland Species of the San Joaquin Valley (Service 1998b).

Table B-1
Plant Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Status in Permit Area or Potential to Occur in Permit Area over the 30-year Permit term	To be Addressed in EA?
Alkali mariposa lily	<i>Calochortus striatus</i>	None/None	1B.2	Chaparral, chenopod scrub, mojavean desert scrub, meadows and seeps/ alkaline, mesic/ perennial bulbiferous herb/ April – June/ 230–5,233 feet	<p>Not likely to occur based on lack of suitable habitat, distance to nearest occurrence, and negative survey results during 2010 and 2011 rare plant surveys. Suitable alkaline soils are present within the Permit Area, however they are associated with vernal pools and this species does not occur in vernal pools.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 40 miles to the south (CNPS 2012).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area does not support suitable vegetation communities. Permit Area does support suitable soils.</p> <p>Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No
American manna grass	<i>Glyceria grandis</i>	None/None	2.3	Bogs and fens, meadows and seeps, marshes and swamps (streambanks and lake margins)/ perennial rhizomatous herb/ June – August/ 49–650 feet	<p>Not likely to occur based on lack of suitable habitat and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 10 miles to the east (CNPS 2012).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area does not support suitable habitat.</p> <p>Project specific survey results: Not observed within the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No

Table B-1
Plant Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Status in Permit Area or Potential to Occur in Permit Area over the 30-year Permit term	To be Addressed in EA?
Brittlescale	<i>Atriplex depressa</i>	None/None	1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pools/ alkaline, clay/ annual herb/ April – October/ 3– 1,050 feet	<p>Low potential to occur based on presence of limited suitable habitat but negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: CNDDDB includes one occurrence within 7.0 miles of the Permit Area, approximately 2.0 miles to the west, but from 1881 (CDFW 2013).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: Limited suitable habitat within the four miles of the Permit Area nearest its terminus at the Big Creek 3 – Springville Transmission Line which contains non-native annual grassland intermixed with vernal pools and seasonal wetlands (Quad Knopf 2011a and Quad Knopf 2011b). The Permit Area does support suitable alkaline and clay soils.</p> <p>Project specific survey results: Limited habitat within the Permit Area and not observed during 2010 or 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No
Calico monkeyflower	<i>Mimulus pictus</i>	None/None	1B.2	Broadleafed upland forest, cismontane woodland/ granitic, disturbed areas/ annual herb/ March – May/ 328–4,692 feet	<p>High potential to occur based on habitat conditions, characteristics, and presence of rocky outcrops (Quad Knopf 2011a).</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 9 miles to the east (CNPS 2012).</p> <p>Range: Permit Area is within elevation range for species.</p>	Yes

Table B-1
Plant Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Status in Permit Area or Potential to Occur in Permit Area over the 30-year Permit term	To be Addressed in EA?
					<p>Habitat: The Permit Area does support suitable habitat. There are approximately 40.27 acres of granitic rock outcrops located within the Permit Area east of the Friant-Kern Canal (Quad Knopf 2011a and Quad Knopf 2011b).</p> <p>Project specific survey results: Not observed during 2010 or 2011 rare plant surveys. However, 2010 surveys were conducted in late spring, towards the end of and after the blooming period of this species (Quad Knopf 2011a and Quad Knopf 2011b).</p>	
California jewel-flower	<i>Caulanthus californicus</i>	FE/SE	1B.1	Nonnative grassland, upper Sonoran subshrub scrub, cismontane juniper woodland and scrub, and valley saltbush scrub ¹ . / subalkaline sandy loam ¹ / annual herb/ February – May/ 240–3,281 feet	<p>Not likely to occur based on lack of occurrences in the vicinity and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: CNDDDB includes two occurrences within 7.0 miles of the Permit Area, both approximately 6.9 miles to the southwest, originally recorded in 1880 and could not be found during surveys in 1986(CDFW 2013). Recovery plan (USFWS 1998) states only 3 known locations: Santa Barbara Canyon, Carrizo Plain, and the Kreyenhagen Hills; however, it also states that additional populations may persist in the foothills of Fresno, Kern, and Kings Counties, where potential habitat remains in rangeland.</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area does support annual grassland land cover and sandy loam soils, which provides species- habitat east of the Friant-Kern Canal, east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b).</p> <p>Project specific survey results: Not observed during 2010 or 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	Yes

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California satintail	<i>Imperata brevifolia</i>	None/None	2.1	Chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali) riparian scrub/ mesic/ perennial rhizomatous herb/ September – May/ 0–3,986 feet	<p>Low potential to occur based on presence of suitable habitat but negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: CNDDDB includes one occurrence within 7.0 miles of the Permit Area, approximately 1.8 miles to the west, but from 1895 (CDFW 2013).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area includes suitable species-habitat in the wetland-riparian land-cover type, which is located at Cottonwood Creek and within the vernal swales located east of the Friant-Kern Canal (Quad Knopf 2011a and Quad Knopf 2011b).</p> <p>Project specific survey results: Not observed during 2010 or 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	None/None	1B.1	Marshes and swamps (coastal salt), playas, vernal pools/ annual herb/ February – June/ 3–4,003 feet	<p>Low potential to occur based on presence of limited suitable habitat, distance to nearest occurrence, and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 30 miles to the southwest (CNPS 2012).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: Limited suitable habitat within the four miles of the transmission line corridor nearest its terminus at the Big Creek 3 – Springville Transmission Line which contains non-native annual grassland intermixed with vernal pools and seasonal wetlands</p>	No

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					(Quad Knopf 2011a and Quad Knopf 2011b). Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).	
Cylindrical trichodon	<i>Trichodon cylindricus</i>	None/None	2.2	Broadleafed upland forest, meadows and seeps, upper montane coniferous forest/ sandy, exposed soil, roadbanks/ moss/ 164–6,569 feet	Not likely to occur based on lack of suitable habitat, distance to nearest occurrence, and negative survey results during 2010 and 2011 rare plant surveys. Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 20 miles to the northeast (CNPS 2012). Range: Permit Area is within elevation range for species. Habitat: The Permit Area does not support suitable habitat. Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).	No
Earlimart orache	<i>Atriplex cordulata</i> var. <i>erecticaulis</i>	None/None	1B.2	Valley and foothill grassland/ annual herb/ August – November/ 131–328 feet	Moderate potential to occur based on presence of marginally suitable habitat and negative survey results during 2010 and 2011 rare plant surveys. Database query: CNDDDB includes 12 occurrences within 7.0 miles of the Permit Area, all approximately 1.0 mile to the northwest (CDFW 2013). Range: Permit Area is within elevation range for species. Habitat: The Permit Area does support marginally suitable non-native annual grassland habitat east of the Friant-Kern Canal,	Yes

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					east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b). Project specific survey results: Not observed during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).	
Heartscale	<i>Atriplex cordulata</i> var. <i>cordulata</i>	None/None	1B.2	Chenopod scrub, meadows and seeps, valley and foothill grassland (sandy)/ saline or alkaline/ annual herb/ April – October/ 0–1,837 feet	Low potential to occur based on presence of marginally suitable habitat and negative survey results during 2010 and 2011 rare plant surveys. Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 8 miles to the west (CNPS 2012). Range: Permit Area is within elevation range for species. Habitat: The Permit Area does support marginally suitable non-native annual grassland habitat east of the Friant-Kern Canal, east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b). Permit Area does support suitable alkaline soils. Project specific survey results: Not observed within the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).	No
Horn's milk-vetch	<i>Astragalus hornii</i> var. <i>hornii</i>	None/None	1B.1	Meadows and seeps, playas/ lake margins, alkaline/ annual herb/ May – October/ 197–2,789 feet	Not likely to occur based on distance to nearest occurrence, lack of suitable habitat, and negative survey results during 2010 and 2011 rare plant surveys. Suitable alkaline soils are present within the Permit Area, however they are associated with vernal pools and this species does not occur in vernal pools.	No

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					<p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 50 miles to the southwest (CNPS 2012).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area does not support suitable vegetation communities. Permit Area does support suitable alkaline soils.</p> <p>Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	
Kaweah brodiaea	<i>Brodiaea insignis</i>	None/SE	1B.2	Cismontane woodland, meadows and seeps, valley and foothill grassland/ granitic or clay/ perennial bulbiferous herb/ April – June/ 492–4,593 feet	<p>Moderate potential to occur based on distance to nearest occurrence, presence of rocky outcrops, and presence of suitable habitat; however, not observed during two years of rare plant surveys.</p> <p>Database query: CNDDDB includes four occurrences within 7.0 miles of the Permit Area, the nearest approximately 2.5 miles to the southeast (CDFW 2013).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area does support suitable habitat. There are approximately 40.27 acres of granitic rock outcrops located within the transmission line corridor east of the Friant-Kern Canal. The Permit Area does support suitable non-native annual grassland habitat east of the Friant-Kern Canal, east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b).</p>	Yes

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					Project specific survey results: Not observed during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).	
Kaweah monkeyflower	<i>Mimulus norrisii</i>	None/None	1B.3	Chaparral, cismontane woodland/ carbonate, rocky/ annual herb/ March – May/ 1,198–4,265 feet (<i>source of habitat description and species range?</i>)	<p>Not likely to occur based on the Permit Area being below the elevation range and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 8 miles to the east (CNPS 2012).</p> <p>Range: Permit Area is below elevation range for species.</p> <p>Habitat: The Permit Area does support suitable habitat. There are approximately 40.27 acres of granitic rock outcrops located within the transmission line corridor east of the Friant-Kern Canal (Quad Knopf 2011a and Quad Knopf 2011b).</p> <p>Project specific survey results: Not observed within the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No
Keck's checkerbloom	<i>Sidalcea keckii</i>	FE/None	1B.1	Cismontane woodland, valley and foothill grassland/ serpentinite, clay/ annual herb/ April – June/ 246–2,133 feet	<p>Clay soils within the Permit Area are associated with vernal pools and the species is not found within this habitat. Not likely to occur based on absence of suitable habitat and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 25 miles to the northwest (CNPS 2012).</p>	No

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Common Name	Scientific Name	Federal/ State Status	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Status in Permit Area or Potential to Occur in Permit Area over the 30-year Permit term	To be Addressed in EA?
					<p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area does support marginally suitable non-native annual grassland habitat east of the Friant-Kern Canal, east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b). Permit Area does support clay soils; however, they are associated with vernal pools. Permit Area does not support a combination of suitable vegetation cover and soils; therefore, suitable habitat does not occur.</p> <p>Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	
Kern mallow	<i>Eremalche kernensis</i>	FE/None	1B.1	Chenopod scrub, valley and foothill grassland/ alkaline sandy loam or clay/annual herb/ March – May/ 230–4,232 feet	<p>Not likely to occur based on presence of marginally suitable habitat, known species location, and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 40 miles to the southwest (CNPS 2012). This species is known to occur only within a 40 mile area in Lokern (USFWS 1998).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area does support marginally suitable non-native annual grassland habitat east of the Friant-Kern Canal, east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No

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					Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).	
Knotted rush	<i>Juncus nodosus</i>	None/None	2.3	Meadows and seeps (mesic), marshes and swamps (lake margins)/ perennial rhizomatous herb/ July – September/ 98–6,496 feet	<p>Not likely to occur based on distance to nearest occurrence, lack of suitable habitat, and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 20 miles to the southeast (CNPS 2012).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area does not support suitable habitat.</p> <p>Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No
Lesser saltscale	<i>Atriplex minuscula</i>	None/None	1B.1	Chenopod scrub, playas, valley and foothill grassland/ alkaline, sandy/ annual herb/ May – October/ 49–656 feet	<p>Moderate potential to occur based on presence of suitable habitat but negative survey results during 2010 and 2011 rare plant surveys. Alkaline soils within the Permit Area are associated with vernal pools and the species is not found within this habitat.</p> <p>Database query: CNDDDB includes nine occurrences within 7.0 miles of the Permit Area, the nearest approximately 1.1 miles to the northwest (CDFW 2013).</p> <p>Range: Permit Area is within elevation range for species.</p>	Yes

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					<p>Habitat: The Permit Area does support marginally suitable non-native annual grassland habitat east of the Friant-Kern Canal, east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b). The Permit Area does support suitable alkaline and sandy soils.</p> <p>Project specific survey results: Not observed during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	
Madera leptosiphon	<i>Leptosiphon serrulatus</i>	None/None	1B.2	Cismontane woodland, lower montane coniferous forest/ annual herb/ April – May/ 984–4,265 feet (source of habitat description and species range?)	<p>Not likely to occur based on the Permit Area being below the elevation range, lack of suitable habitat, and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 8 miles to the east (CNPS 2012).</p> <p>Range: Permit Area is below elevation range for species.</p> <p>Habitat: The Permit Area does not support suitable habitat.</p> <p>Project specific survey results: Not observed within the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No
Mouse buckwheat	<i>Eriogonum nudum var. murinum</i>	None/None	1B.2	Chaparral, cismontane woodland, valley and foothill grassland/ sandy/ perennial herb/ June – November/ 1,198–3,708 feet	<p>Not likely to occur based on the Permit Area being below the elevation range and negative survey results during 2010 and 2011 rare plant surveys.</p>	No

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					<p>Database query: CNDDDB includes two occurrences within 7.0 miles of the Permit Area, the nearest approximately 3.6 miles to the northeast (CDFW 2013).</p> <p>Range: Permit Area is below elevation range for species.</p> <p>Habitat: The Permit Area does support suitable soils and marginally suitable non-native annual grassland habitat east of the Friant-Kern Canal, east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b).</p> <p>Project specific survey results: Not observed during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	
Munz's iris	<i>Iris munzii</i>	None/None	1B.3	<p>Cismontane woodland/ perennial rhizomatous herb/ March – April/ 1,001–2,625 feet</p> <p><i>(source of habitat description and species range?)</i></p>	<p>Not likely to occur based on the Permit Area being below the elevation range, lack of suitable habitat, and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 20 miles to the northeast (CNPS 2012).</p> <p>Range: Permit Area is below elevation range for species.</p> <p>Habitat: The Permit Area does not support suitable habitat.</p> <p>Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No

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Northern clustered sedge	<i>Carex arcta</i>	None/None	2.2	Bogs and fens, North Coast coniferous forest (mesic)/ perennial herb/ June – September/ 197–4,593 feet (source of habitat description and species range?)	<p>Not likely to occur based on lack of suitable habitat and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 70 miles to the southeast (CNPS 2012).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area does not support suitable habitat.</p> <p>Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No
Piute Mountains navarretia	<i>Navarretia setiloba</i>	None/None	1B.1	Cismontane woodland, pinyon and juniper woodland, valley and foothill grassland/ clay or gravelly loam/ annual herb/ April – July/ 935–6,890 feet (source of habitat description and species range?)	<p>Not likely to occur based on the Permit Area being below the elevation rangelack of suitable soils, and negative survey results during 2010 and 2011 rare plant surveys. Clay soils within the Permit Area are associated with vernal pools and the species is not found within this habitat.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 50 miles to the southeast (CNPS 2012).</p> <p>Range: Permit Area is below elevation range for species.</p> <p>Habitat: The Permit Area does support marginally suitable non-native annual grassland east of the Friant-Kern Canal, east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b). The Permit Area does support</p>	No

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					suitable clay soils; however, clay soils are associated with vernal pools and the species is not found within this habitat. Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).	
Prairie wedge grass	<i>Sphenopholis obtusata</i>	None/None	2.2	Cismontane woodland, meadows and seeps/ mesic/ perennial herb/ April-July/ 984–6,562 feet (source of habitat description and species range?)	Not likely to occur based on the Permit Area being below the elevation range, lack of suitable habitat, and negative survey results during 2010 and 2011 rare plant surveys. Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 45 miles to the southeast (CNPS 2012). Range: Permit Area is below elevation range for species. Habitat: The Permit Area does not support suitable vegetation communities. Permit Area does support suitable soils. Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).	No
Recurved larkspur	<i>Delphinium recurvatum</i>	None/None	1B.2	Chenopod scrub, cismontane woodland, valley and foothill grassland/ alkaline/ perennial herb/ March – June/ 10–2,592 feet	Moderate potential to occur based on presence of suitable habitat and distance to nearest occurrence. Database query: CNDDDB includes seven occurrences within 7.0 miles of the Permit Area, the nearest approximately 1.2 miles to the north (CDFW 2013).	Yes

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Rose-flowered larkspur	<i>Delphinium purpusii</i>	None/None	1B.3	Chaparral, cismontane woodland, pinyon and juniper woodland/ rocky, often carbonate/ perennial herb/ April – May/ 984–4,397 feet	<p>Not likely to occur based on the Permit Area being below the elevation range and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 12 miles to the east (CNPS 2012).</p> <p>Range: Permit Area is below elevation range for species.</p> <p>Habitat: The Permit Area does support suitable habitat. There are approximately 40.27 acres of granitic rock outcrops located within the transmission line corridor east of the Friant-Kern Canal (Quad Knopf 2011a and Quad Knopf 2011b).</p> <p>Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No

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Plant Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Status in Permit Area or Potential to Occur in Permit Area over the 30-year Permit term	To be Addressed in EA?
Round-leaved filaree	<i>California macrophylla</i>	None/None	1B.1	Cismontane woodland, valley and foothill grassland/ clay/ annual herb/ March – May/ 49–3,937 feet	<p>Low potential to occur based on presence of suitable habitat, distance to nearest occurrence, and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 40 miles to the southeast (CNPS 2012).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area does support marginally suitable non-native annual grassland habitat east of the Friant-Kern Canal, east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b). The Permit Area does support suitable clay soils.</p> <p>Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No
Spiny-sepaed button-celery	<i>Eryngium spinosepalum</i>	None/None	1B.2	Valley and foothill grassland, vernal pools/ annual/ perennial herb/ April – May/ 262–837 feet	<p>Present based on 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p> <p>Database query: CNDDB includes 44 occurrences within 7.0 miles of the Permit Area, the nearest approximately 0.2 mile to the north (CDFW 2013).</p> <p>Range: Permit Area is within elevation range for species.</p>	Yes

Table B-1
Plant Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Status in Permit Area or Potential to Occur in Permit Area over the 30-year Permit term	To be Addressed in EA?
					<p>Habitat: The Permit Area includes suitable annual grassland land cover east of the Friant-Kern Canal, east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b).</p> <p>Project specific survey results: Rare plant surveys in 2010 and 2011 detected this species at multiple locations within the Permit Area east of Friant-Kern Canal (Quad Knopf 2011a and Quad Knopf 2011b).</p>	
Springville clarkia	<i>Clarkia springvillensis</i>	FT/SE	1B.2	Chaparral, cismontane woodland, valley and foothill grassland/ granitic/ annual herb/ May – July/ 804–4,003 feet	<p>Low potential to occur based on the Permit Area being below the elevation range and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 10 miles to the east (CNPS 2012).</p> <p>Range: Permit Area is below elevation range for species.</p> <p>Habitat: The Permit Area does support marginally suitable non-native annual grassland habitat east of the Friant-Kern Canal, east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b). There are approximately 40.27 acres of granitic rock outcrops located within the transmission line corridor east of the Friant-Kern Canal (Quad Knopf 2011a and Quad Knopf 2011b).</p> <p>Project specific survey results: Not observed within the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No

Table B-1
Plant Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Status in Permit Area or Potential to Occur in Permit Area over the 30-year Permit term	To be Addressed in EA?
Striped adobe-lily	<i>Fritillaria striata</i>	None/ST	1B.1	Cismontane woodland, valley and foothill grassland/ usually clay/ perennial bulbiferous herb/ February – April/ 443–4,774 feet	<p>Low potential to occur based on presence of marginally suitable habitat, location of nearest occurrence, and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 18 miles to the southeast (CNPS 2012).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area does support marginally suitable non-native annual grassland habitat east of the Friant-Kern Canal, east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b).</p> <p>Project specific survey results: Not observed during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	Yes
Subtle orache	<i>Atriplex subtilis</i>	None/None	1B.2	Valley and foothill grassland/ annual grassland/ June – October/ 131–328 feet	<p>Low potential to occur based on location of nearest occurrence and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 9 miles to the west (CNPS 2012).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area does support marginally suitable non-native annual grassland habitat east of the Friant-Kern Canal, east of Cottonwood Creek, and south of St. Johns River (Quad Knopf 2011a and Quad Knopf 2011b).</p>	No

Table B-1
Plant Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Status in Permit Area or Potential to Occur in Permit Area over the 30-year Permit term	To be Addressed in EA?
					Project specific survey results: Not observed during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).	
Vernal pool smallscale	<i>Atriplex persistens</i>	None/None	1B.2	Vernal pools (alkaline)/ annual herb/ June – October/ 33–377 feet	<p>Moderate potential to occur based on presence of suitable habitat, location of nearest occurrence, suitable soils, and elevation range.</p> <p>Database query: CNDDDB includes six occurrences within 7.0 miles of the Permit Area, the nearest approximately 1.7 miles to the north (CDFW 2013).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: Suitable grassland habitat intermixed with vernal pools and seasonal wetlands are located in the easternmost four miles of the transmission line corridor (Quad Knopf 2011a and Quad Knopf 2011b). The Permit Area does support suitable alkaline soils.</p> <p>Project specific survey results: Not observed during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).</p>	Yes
Watershield	<i>Brasenia schreberi</i>	None/None	2.3	Marshes and swamp, freshwater/ perennial rhizomatous herb/ June – September/ 98–7,218 feet	<p>Not likely to occur based on lack of suitable habitat, distance to nearest occurrence, and negative survey results during 2010 and 2011 rare plant surveys.</p> <p>Database query: No CNDDDB occurrences within 7.0 miles of the Permit Area (CDFW 2013). Nearest occurrence approximately 40 miles to the southeast (CNPS 2012).</p> <p>Range: Permit Area is within elevation range for species.</p> <p>Habitat: The Permit Area does not support suitable habitat.</p>	No

**Table B-1
Plant Species with Potential to Occur in HCP Permit Area**

Common Name	Scientific Name	Federal/ State Status	CRPR	Primary Habitat Associations/Life Form/Blooming Period	Status in Permit Area or Potential to Occur in Permit Area over the 30-year Permit term	To be Addressed in EA?
					Project specific survey results: Not observed in the Permit Area during 2010 and 2011 rare plant surveys (Quad Knopf 2011a and Quad Knopf 2011b).	

1: USFWS 1998. "Recovery Plan for Upland Species of the San Joaquin Valley"

Notes:

** Federally designated Critical Habitat for these species exists within the Habitat Conservation Plan Planning Area.

CDFW – California Department of Fish and Wildlife (formerly California Department of Fish and Game [CDFG])

CNDDDB – California Natural Diversity Database

CNPS – California Native Plant Society

CRPR – California Rare Plant Rank

POTENTIAL OCCURRENCE DEFINITIONS:

Present – Species observed within Permit Area during field surveys.

High – Species not observed on site, exceptional habitat exists, reasonably expected to occur, and additional surveys would assist in verifying presence.

Moderate – Species not observed on the project site, marginally suitable habitat exists, and additional surveys would assist in verifying presence.

Low – Species not observed on the site, marginally suitable habitat exists, and additional surveys would assist in verifying presence.

Very Low – Species not observed on the site, poor and or patchy habitat exists, and additional surveys would assist in verifying presence.

STATUS CODES:

Federal (U.S. Fish and Wildlife Service [USFWS]):

FE – Listed as Endangered by the Federal Government

FT – Listed as Threatened by the Federal Government

FPE – Listed as Proposed Endangered by the Federal Government

FPT – Listed as Proposed Threatened by the Federal Government

State (California Department of Fish and Wildlife [CDFW]):

SE – Listed as Endangered by the State of California

ST – Listed as Threatened by the State of California

SR – Listed as Rare by the State of California

SC – State of California Candidate for listing

California Native Plant Society (CNPS), California Rare Plant Rank (CRPR):

List 1A – Plants presumed extinct in California

List 1B – Plants rare, threatened, or endangered in California and elsewhere

List 2 – Plants rare, threatened, or endangered in California, but more common elsewhere

0.1 – Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

0.2 – Fairly threatened in California (20-80% of occurrences threatened / moderate degree of immediacy of threat)

0.3 – Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

The following wildlife are covered by the HCP and will be addressed in the EA: valley elderberry longhorn beetle, vernal pool fairy shrimp, vernal pool tadpole shrimp, California tiger salamander, burrowing owl, southwestern willow flycatcher, little willow flycatcher, least Bell's vireo, and San Joaquin kit fox.

The following list of wildlife potentially occurring in the HCP Permit Area and not covered by the HCP was generated from the following resources:

- CNDDDB 7-mile query (CDFG 2012)
- Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (Service 2005)
- Recovery Plan for Upland Species of the San Joaquin Valley (Service 1998b)
- Birds of Conservation Concern (Service 2008) for Region 32
- California Bird Species of Special Concern (Shuford and Gardali 2008)
- Range maps in California Wildlife Habitat Relationships (Zeiner et al. 1988-1990)
- Range maps in California Herps: A Guide to the Amphibians and Reptiles of California (2013; californiasherps.com)
- Range maps in Mammals of the Pacific States (Ingles 1965)
- Service database Species List.

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
<i>Amphibians</i>					
Foothill yellow-legged frog	<i>Rana boylei</i>	None/CSC	Perennial or seasonal creeks and rivers. Breeding occurs from late March to early June, following stream high-water stages. Occupies a number of habitats, including valley foothill hardwood, valley foothill riparian, and mixed conifer woodlands (Zeiner et al. 1990; Morey 2000). This species normally does not move far from streams.	<p>Extremely low potential to occur in Permit Area due primarily to the lack of suitable breeding habitat (cobble and boulder substrates) and summer refugia habitat (water is not present during the summer months and there is no riparian shading) within and adjacent to the Permit Area, and to the absence of any documented occurrence records in the general area. This species does not occur on the valley floor and can only persist in seasonal streams that contain residual pools and adequate shading through the summer and fall months.</p> <p>Database query: CNDDDB includes two occurrences within 7.0 miles of the Permit Area, the nearest approximately 6.1 miles to the north. Both are from 1970, but both are listed by CNDDDB as “presumed extant” (CDFW 2013).</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: In Tulare County, generally occurs throughout the Sierra Nevada foothills <i>up to approximately 5000 ft. in elevation</i>, including the eastern end of the Permit Area if suitable streams were present.</p> <p>Permit Area habitat: The Permit Area crosses two seasonal creeks: Cottonwood Creek near the edge of the Sierra foothills (where this species could potentially occur); and the Saint John’s River located on the valley floor at the western edge of the Permit Area. However, neither of these streams contain suitable habitat for breeding or summer refugia (i.e., substrates consist primarily of sand and gravel, and water is not present during the</p>	No

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
				summer and fall months. Project specific survey results? Surveys were not conducted due to lack of suitable habitat within and adjacent to the Permit Area.	
Northern leopard frog	<i>Lithobates pipiens</i>	None/CSC (native populations only)	Requires water with emergent vegetation for reproduction and shoreline vegetation for cover. May forage in damp meadows far from water. Feeds on a variety of terrestrial and aquatic prey, including invertebrates and smaller vertebrates (Zeiner et al. 1990; Stebbins 2003, 3rd Ed.; Morey 2000).	May be present in the general region as non-native only. Native populations occur in Northeastern California and in the Owens Valley; although, these populations have been substantially reduced. No potential to occur as a native, since the Permit Area is a considerable distance outside of the species' range. In addition, the seasonal streams within the Permit Area do not provide suitable breeding or summer refugia habitat for this species since these streams do not contain permanent or semi-permanent water and streamside vegetation and other aquatic vegetation is generally absent. Database query: CNDDB includes five occurrences within 7.0 miles of the Permit Area, although it notes that occurrences involve transplants outside the species' native range (CDFW 2013). Service database query: Not identified on Service Species List Range: Native to parts of California east of the Sierra Nevada and the Cascade Range (sea level to 2130 m [7000 ft.] in elevation), but are considered to be introduced elsewhere in California. The Permit Area is not within the native range of this species. Permit Area habitat: Since Cottonwood, Mill, Packwood, and Cameron creeks; and the St. Johns River do not contain permanent or semi-permanent water and streamside and aquatic	No

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
				vegetation is sparse or absent, potential habitat for this species is Project specific survey results: Since only non-native frogs could potentially be present, surveys were not conducted.	
Western spadefoot	<i>Spea hammondi</i>	None/CSC	Grasslands and low foothill regions where lowland aquatic sites are available for breeding. Adults remain in underground burrows during most of the year. May range up to 1,200 feet from breeding ponds. Adults typically initiate surface movements during the first fall rains to breed. They breed almost exclusively in shallow, temporary pools created by winter rains. Recently metamorphosed juveniles seek refuge in the immediate vicinities of breeding ponds for several days after transformation (Zeiner et al. 1990; Stebbins 2003, 3rd Ed.; Morey 2000). Adult movements to and from breeding ponds are rarely extensive and will travel up to several meters on rainy nights (Morey 2000), indicating that adults use underground refugia that is relatively close to breeding sites).	Present. Database query: CNDDDB includes 23 occurrences within 7.0 miles of the Permit Area (CDFW 2013), with the nearest occurrence records located within the Permit Area. Service database query: Not identified on Service Species List Range: Occurs in the southern Sierra Nevada foothills and San Joaquin Valley portions of Tulare County mostly below 900 m (3,000 ft) in elevation but has been found up to 1,363 m (4,500 ft). , The Permit Area is within the range of this species. Permit Area habitat: Breeding habitat consists primarily of shallow temporary (seasonal) pools which occur throughout the Permit Area, particularly east of the Friant-Kern Canal. However, this species has also been found breeding in quiet streams. Project specific survey results: Focused surveys in 2011 detected this species in 35 of 55 sample sites within the 1000-foot-wide Permit Area Quad Knopf (2011c).	Yes
<i>Reptiles</i>					
Blunt-nosed leopard lizard	<i>(Gambelia sila)</i>	FE/SE, FP	Occurs in desert scrub, semiarid grasslands, sparsely vegetated alkali flats, low foothills, and washes of the San Joaquin Valley and nearby valleys	Low potential to occur since only marginal habitat is present and the Permit Area is outside the known range of this species. Database query: No CNDDDB occurrences within 7.0 miles of the	No

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
			and foothills (Zeiner et al. 1990; Stebbins 2003, 3rd Ed.). Seeks refuge in small mammal burrows, and under shrubs or structures. Preys primarily on insects and smaller lizards.	<p>Permit Area (CDFW 2013). The nearest occurrence is from 1974, approximately 18 miles southwest of the Permit Area, and is "presumed extant" per CNDDB.</p> <p>Service database query: Identified on Service Species List</p> <p>Range: Found at elevations of 30 to 730 m (100 to 2400 ft). The known range and all known occurrences of this species in Tulare County are from west of State Route 99 (SR-99) and more than 10 miles from the Permit Area (USFWS 1998, CNDDB 2012). The Permit Area is within the species' range..</p> <p>Permit Area habitat: Non-native grassland land-cover is present within the Permit Area, east of the Friant-Kern Canal and may provide marginally suitable habitat, although this area is outside the species' known range.</p> <p>Project specific survey results: Surveys were not conducted for this species since only marginal habitat is present and the Permit Area is outside the species' known range.</p>	
Blainville's horned lizard	<i>Phrynosoma blainvillii</i>	None/CSC	Inhabits a wide variety of habitats in open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains from sea level up to 2,438 m (8,000 ft) in elevation (Stebbins 2003, Third Ed.). Requires open areas for sunning, shrubs for cover, patches of loose soil for burial, and an abundant supply of ants and other insects.	<p>Moderate potential to occur.</p> <p>Database query: CNDDB includes no occurrences of this species within 7.0 miles of the Permit Area (CDFW 2013).</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: The species' known range extends along the Sierra Nevada foothills the length of Tulare County.</p> <p>Permit Area habitat: Grasslands land-cover located in the eastern portion of the Permit Area, Non-native grasslands and</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
				oak woodland land-covers occur east of the Friant-Kern Cannel within and adjacent to the Permit Area. Project specific survey results: Surveys were not conducted.	
Silvery legless lizard	<i>Anniella pulchra pulchra</i>	None/CSC	Occurs primarily in areas with sandy or loose loamy soils in areas underneath sparse vegetation on beach dunes, chaparral, pine-oak woodland and pine forests, sandy washes; or near sycamores, cottonwoods, or oaks that grow on stream terraces (Zeiner et al. 1990; Stebbins 1985, Jennings and Hayes 1994) but may also seek cover under objects such as boards and rocks	Moderate potential to occur. Database query: CNDDDB includes no occurrences within 7.0 miles of the Permit Area (CDFW 2013). Service database query: Not identified on Service Species List Range: Occurs in the San Joaquin Valley from San Joaquin County south to Kern County and from near sea level to approximately 1,800 m (5,905 ft) above sea level in the Sierra Nevada foothills.. Permit Area is within the species range. Records from the California Academy of Sciences suggest this species occurs in the vicinity of the Permit Area east of the Friant-Kern Canal. Permit Area habitat: May occur in riparian habitats or the small areas of oak woodland. Project specific survey results: Surveys were not conducted.	Yes
Southwestern pond turtle	<i>Actinemys marmorata pallida</i>	None/CSC	Occurs in woodlands, grasslands, and open forests in a variety of wetland habitats, including ponds, rivers, lakes, marshes, reservoirs, stock ponds, and irrigation ditches that contain aquatic vegetation (Zeiner et al. 1990; Stebbins 2003, 3rd Ed.). Spends its time in water	Low potential to occur due primarily to the lack of permanent water within the seasonal creeks and ditches in and adjacent to the Permit Area. Database query: CNDDDB includes two occurrences within 7.0 miles of the project Permit Area, including an undated occurrence approximately 6.0 miles southeast of the eastern terminus of the	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
			or at basking sites along the banks of streams or ponds.	<p>Permit Area and one from 1869 (CDFW 2013) approximately 2.0 miles west of the Permit Area, in the City of Visalia.</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Occurs widely in the Sierra Nevada foothills and the San Joaquin Valley. The Permit Area is within the species range.</p> <p>Permit Area habitat: The Permit Area crosses the Saint John's River and Cottonwood Creek; however, these two streams and the irrigation ditches in the Permit Area do not provide suitable habitat due to the lack of permanent water and the general absence of aquatic vegetation.</p> <p>Project specific survey results: None were detected during biological surveys, although no focused surveys were conducted.</p>	
<i>Birds</i>					
American peregrine falcon	<i>Falco peregrinus</i>	Delisted, BCC/ Delisted, FP	Breeds on sea coasts, offshore islands, and mountainous areas with cliffs. Nests on rocky cliffs ledges or ridges, in crevices, and may sometimes nest on human-made structures or in trees (Zeiner et al. 1990; Fix and Bezener 2000). Nests are usually near water and available prey, although this species may travel long distances to forage. Feeds in open habitats, where they hunt mostly birds, ranging in size from songbirds to small geese (White et al. 2002).	<p>Low to moderate potential to nest, high potential to forage regularly.</p> <p>Database query: CNDDDB includes no occurrences within 7.0 miles of the Permit Area (CDFW 2013). Peregrine falcons occupy territories around their nests that they defend with vocalizations and attacks (White <i>et al.</i> 2002; Cade 1960). This territory is minimally the area enclosed by a 96-meter (300-foot) radius around the nest and is usually larger (Cade 1960). Home range of individual pairs also fluctuates with prey abundance, and varies from approximately 320 square kilometers (125 square miles) in Sonoma County to 1,662 square kilometers (616 square miles) in the Rocky Mountains.</p> <p>Service database query: Not identified on Service Species List</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
				<p>Range: Summer resident in the foothill and high mountain regions of Tulare County (except in the south), and present in winter throughout the county. The Permit Area is not within this species nesting range; however, the Permit Area is within the species wintering range.</p> <p>Permit Area nesting habitat: Rock outcrops adjacent to the Permit Area in the foothill areas may be suitable for nesting by this species.</p> <p>Permit Area foraging habitat: Species likely forages in all natural land-cover types in the Permit Area vicinity.</p> <p>Project specific survey results: One detected in the Permit Area along the St. Johns River during riparian bird surveys on June 20, 2011 (Quad Knopf 2011c). None detected during general raptor surveys in 2010 (Quad Knopf 2012b).</p>	
Bald eagle	<i>Haliaeetus leucocephalus</i>	Delisted, BGEPA, BCC/SE, FP	Lives near large bodies of open water such as lakes, marshes, estuaries, seacoasts and rivers, where fish are abundant. Usually nests in tall trees with open branchwork bordering lakes or large rivers (Zeiner et al. 1990; Fix and Bezener 2000). In Central California, bald eagles prefer foothill pines for nesting.. <i>The population is expanding in California, and population size is expected to increase over the 30-year permit term (H. Beeler pers. comm. 2-27-13).</i>	<p>Moderate potential to occur; low potential to nest.</p> <p>Database query: CNDDDB includes no occurrences within 7.0 miles (approximate species home-range distance) of the Permit Area (CDFW 2013).</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Permanent resident in the foothills and higher mountains of Tulare County. Permit Area is within the species range.</p> <p>Permit Area nesting habitat: Some potential to nest in or near the Permit Area in large trees and forage outside of the Permit Area.</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
				<p>Permit Area foraging habitat: Some potential to forage in the Permit Area vicinity, especially at the Saint John's River and Cottonwood Creek crossings when water is present.</p> <p>Project specific survey results: A nest with two nestlings was in a valley oak (<i>Quercus lobata</i>) 4.4 mi north of the Permit Area on April 29, 2011 (Bloom 2011).</p>	
Black-chinned sparrow	<i>Spizella atrogularis</i>	BCC/SA	<p>Prefers steep slopes with tall, dense 'hard' chaparral and other scrub habitats sometimes dotted with small conifers. This species can also be found in areas of chamise-redshank chaparral and sagebrush (<i>Artemisia</i> spp.), with scrub vegetation serving as understory to pinyon-juniper, juniper, and other sparse conifer forest (Zeiner et al. 1990). Occurs along the west slopes of the Sierras south of Placer County at elevations up to 1219 m 8200 ft. However, Gaines (1992) reported them as a rare summer resident below 4000' on the west slope of the Sierras.</p>	<p>Very low potential to occur due to the lack of suitable habitat and low elevation of the Permit Area.</p> <p>Database query: CNDDDB does not track records of this species.</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Within Tulare County, occurs in the Sierra Nevada foothills (Zeiner et al. 1990). Permit Area is within species range; however, presence is unlikely since they are normally found at elevations above 1219 m (4000 ft).</p> <p>Permit Area nesting habitat: Suitable scrub habitats are absent within and adjacent to the Permit Area.</p> <p>Permit Area foraging habitat: Suitable scrub habitats are absent within and adjacent to the Permit Area.</p> <p>Project specific survey results: Surveys were not conducted.</p>	No
Black swift	<i>Cypseloides niger</i>	None/CSC	<p>Nests on wet cliffs along the ocean and in interior steep mountain canyons, especially cliffs adjacent to waterfalls (Zeiner et al. 1990; Fix and Bezener 2000). Forages in forests and</p>	<p>Low potential to occur due to the lack of suitable nesting habitat.</p> <p>Database query: CNDDDB includes no records within 7.0 miles of the Permit Area (CDFW 2013).</p>	No

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
			woodlands, canyons, valleys, and savannahs in the vicinity of nesting locations.	<p>Service database query: Not identified on Service Species List</p> <p>Range: Occurs widely as a migrant in Tulare County, but nests only in the higher mountains of the county, including Sequoia National Park and near Springville (Roberson and Collins 2008). The Permit Area is within the range of this species.</p> <p>Permit Area nesting habitat: The Permit Area and vicinity lack the cliffs and steep canyons suitable for nesting by this species.</p> <p>Permit Area foraging habitat: Foraging forays last throughout most of the daylight hours, and swifts may forage up to 40 km (25 mi) from nesting colonies. As a result, foraging could occur within and adjacent to the Permit Area if nests occur within 40 km of the Permit Area. May also forage in the Permit Area as a migrant.</p> <p>Project specific survey results: Surveys were not conducted.</p>	
California condor	<i>Gymnogyps californianus</i>	FE/SE	Habitat includes mountains, foothills, and canyons but prefers mountains, gorges, and hillsides, which create updrafts favorable for soaring. Nests in caves, cliff crevices, behind rock slabs, on large ledges on high sandstone cliffs, and large tree cavities (Zeiner et al. 1990; Fix and Bezener 2000). Feeds on large and medium-sized carrion.	<p>Moderate potential to occur, very low potential to nest.</p> <p>Database query: Three separate individuals were detected within 15 miles of the Permit Area in May 2011, including one approximately 1.4 miles north of the Permit Area (Quad Knopf 2012b), although these may have been engaged in exploratory or dispersal flights.</p> <p>Service database query: Identified on Service Species List</p> <p>Range: The species is absent from the San Joaquin Valley floor but occurs in the surrounding foothills and mountains. The Permit Area is within the range of this species. The Condor's Tulare</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
				<p>County Rangelands Critical Habitat Area (42 FR 47840 47845) extends to within 5.1 miles of the Permit Area, southeast of the eastern terminus of the Permit Area.</p> <p>Permit Area nesting habitat: No suitable nesting habitat is located near the Permit Area.</p> <p>Permit Area foraging habitat: The potential for occurrence by this species is limited by the relative lack of slopes >50 degrees and cliff faces >72 degrees and suitable for nesting. Suitable foraging habitats occur in the eastern portion of the Permit Area.</p> <p>Project specific survey results: None detected during focused surveys in 2011 (Quad Knopf 2012b). Pair of condors roosted overnight May 2011 approximately one mile north of Permit Area east of Friant-Kern Canal (Jesse Grantham, <i>in litt</i> 2011).</p>	
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA/FP	Occurs in a variety of habitats including forests, canyons, shrub lands, grasslands, and oak woodlands. Typically nests on cliffs and within large trees in open areas (Zeiner et al. 1990; Fix and Bezener 2000). Rugged, open habitats with canyons and escarpments are used most frequently for nesting, but are also known to nest on tubular steel poles and lattice steel towers. Nests consist of large platforms composed of sticks, twigs, and greenery. Golden eagles need open natural land-cover for hunting, and soar between 100 and 300 feet aboveground	<p>High potential to occur.</p> <p>Database query: CNDDDB includes no occurrences within 7.0 miles of the Permit Area (CDFW 2013). DeLong [2004] found species home ranges varied from 1.9 to 83.3 km² with an average of 22.8 km².</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Permanent resident in the foothills and mountains in Tulare County and found on the San Joaquin Valley floor in winter. Permit Area is within this species' range.</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
			in search of prey.	<p>Permit Area nesting habitat: Oak woodland land cover within and adjacent to the Permit Area provides suitable nesting habitat.</p> <p>Permit Area foraging habitat: Suitable foraging habitat occurs in the portion of the Permit Area east of Friant-Kern Canal, in non-native grasslands and the small areas of oak woodlands.</p> <p>Project specific survey results: During focused surveys in 2011, four active nests in 2011 were observed within (4.0 miles) of the eastern Permit Area, with an additional nest approximately (4.3 miles) north (Bloom 2011).</p>	
Grasshopper sparrow	<i>Ammodramus savannarum</i>	None/CSC (nesting)	Occurs and breeds in dense, dry, or well-drained annual and native grasslands with mix of grasses and forbs; and in savannahs in rolling hills and lower mountain hillsides from seal level to 1494 m (4900 ft.) (Zeiner et al. 1990; Fix and Bezener 2000). May also occur in fallow agricultural fields, especially those periodically planted in oats and barley.	<p>Moderate potential to occur.</p> <p>Database query: CNDDDB includes no occurrences within the Permit Area or anywhere in Tulare County (CDFW 2013), although this species is under-represented in the database.</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Range includes the Central Valley margins in Tulare County, such as near Porterville, Tulare County (Unitt 2008), which is approximately 20 miles south southwest of the Permit Area. The Permit Area is within this species' range.</p> <p>Permit Area nesting habitat: Non-native grassland land-cover in the eastern portion of the Permit Area may provide suitable habitat, covering less than 5 percent of the Permit Area.</p> <p>Permit Area foraging habitat: Suitable non-native grassland habitat occurs in the Permit Area east of the Friant-Kern Canal.</p> <p>Project specific survey results: Surveys were not conducted.</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
Great blue heron	<i>Ardea herodias</i>	CDFG:S	Occurs in a wide variety of freshwater and calm-water intertidal habitats of nearly every description. Colonial nester in large trees near water, snags, and tall bush or marsh vegetation (Zeiner et al. 1990; Fix and Bezener 2000). Feeds primarily in shallow water, but also forages in open upland habitats, especially in the non-breeding season. Eats mostly fish, but also preys on amphibians, reptiles, small birds and mammals, and invertebrates.	<p>This species is present within the Permit Area; however, there is low potential for nesting due to the lack of permanent or semi-permanent water within or immediately adjacent to the Permit Area, even though riparian trees in and near the Permit Area are large enough to support nesting.</p> <p>Database query: CNDDDB includes 1986 occurrences associated with a rookery along Dry Creek with 18 nests approximately 2.5 miles southeast of the eastern terminus of the Permit Area (CDFW 2013).</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Permanent resident in the lowlands and Sierra Nevada foothills of Tulare County. The Permit Area is within the range of this species.</p> <p>Permit Area nesting habitat: Some potential to nest in tall trees along the St. John's River or Cottonwood Creek.</p> <p>Permit Area foraging habitat: Open water, creeks, wetlands, agricultural ponds. Non-native grasslands also provide suitable foraging habitat, especially in winter.</p> <p>Project specific survey results: An individual was detected along the St. John's River during riparian bird surveys on June 20, 2011, but no nesting colonies were detected (Quad Knopf 2011c).</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
Lawrence's goldfinch	<i>Spinus lawrencei</i>	BCC/SA	Occurs and nests in habitats close to water including oak-pine woodlands, pinyon-juniper woodlands and lower montane habitats, chaparral, brushy fields, meadows, desert riparian, and palm oasis (Zeiner et al. 1990; Fix and Bezener 2000). May nest in loose colonies in oaks and a variety of other trees and shrubs.	<p>Moderate potential to occur.</p> <p>Database query: CNDDDB does not track records of this species.</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Breeds in the foothills of the Sierra Nevada in Tulare County. The Permit Area is within this species' range.</p> <p>Permit Area nesting habitat: May nest in the small areas of oak woodland and riparian habitats within and adjacent to the Permit Areas, particularly in areas near water.</p> <p>Permit Area foraging habitat: Forages on flower heads and stalks and in trees and shrubs and occasionally forages on the ground near breeding locations. Small areas of oak woodland and riparian habitat at the east end of the Permit Area may be suitable for foraging.</p> <p>Project specific survey results: Surveys were not conducted.</p>	Yes
Loggerhead shrike	<i>Lanius ludovicianus</i>	BCC/CSC (nesting)	Prefers open habitats with scattered shrubs adjacent to dense brush including savannah, oak woodlands, sagebrush plains, pinyon-juniper woodlands, ranches and some suburbs (Zeiner et al. 1990; Fix and Bezener 2000). Nests in densely foliated shrubs or trees. Utilizes trees, posts, fences, utility lines, or other perches, and requires impaling areas, such as thorns,	<p>High potential to occur.</p> <p>Database query: CNDDDB includes no records for this species within 7.0 miles of the Permit Area; however, this species is underrepresented in the database (CDFW 2013).</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Breeds throughout the Tulare county except in the higher mountains (Humple 2008). The Permit Area is within the range of</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
			sharp twigs, or barbed wire, for skewering and manipulating its prey.	<p>this species.</p> <p>Permit Area nesting habitat: Suitable habitat occurs in agricultural and grassland land-cover types where suitable nesting trees or shrubs occur, and in the oak woodland land-cover type.</p> <p>Permit Area foraging habitat: A variety of relatively open (lacking dense vegetation) land-cover types found on the Permit Area and vicinity, including agricultural, non-native grasslands, and oak woodlands, provide suitable foraging habitat.</p> <p>Project specific survey results: Surveys were not conducted.</p>	
Long-billed curlew	<i>Numenius americanus</i>	BCC/WL (nesting)	Inhabits tidal mudflats, estuaries, saltwater marshes, and tidal channels; but may also be found in grasslands and agricultural fields with short grasses. Breeds in grasslands interspersed with lakes, wet meadows, or marshes (Zeiner et al. 1990; Fix and Bezener 2000). In winter and during migration, forages at beaches, coastal marshes, upland herbaceous areas, and croplands.	<p>No potential to nest, as the Permit Area is outside the species' nesting range; moderate potential to forage.</p> <p>Database query: CNDDDB does not track records of this species.</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: In California, breeds only in the northeastern portion of the state. Winters in the San Joaquin Valley and valley margins in Tulare County. The Permit Area is within the winter range of this species.</p> <p>Permit Area nesting habitat: None.</p> <p>Permit Area foraging habitat: May forage in winter in non-native grassland land-cover, which is located east of the Friant-Kern Canal.</p> <p>Project specific survey results: Surveys were not conducted.</p>	No

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
Marbled godwit	<i>Limos fedoa</i>	BCC/None	This species is only present in California during the winter. In winter, forages at beaches, estuaries, emergent wetlands, upland fields, and salt ponds, where they probe the soil for aquatic and other invertebrates (Zeiner et al. 1990; Fix and Bezener 2000).	<p>No potential to nest, as the Permit Area is outside the species' nesting range. Since the range of this species occurs to the west of the Permit Area, there is very low potential to forage in the Permit Area during winter.</p> <p>Database query: CNDDDB does not track records of this species.</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Occurs rarely in the San Joaquin Valley in winter and during migration. The Permit Area occurs near the eastern extent of this species' range. This species does not nest in California.</p> <p>Permit Area nesting habitat: None.</p> <p>Permit Area foraging habitat: May forage occasionally in vernal pools or grasslands land covers east of Friant-Kern Canal.</p> <p>Project specific survey results: Surveys were not conducted.</p>	No
Mountain plover	<i>Charadrius montanus</i>	FPT, BCC/CSC	Occurs in short grasslands, freshly plowed fields, newly sprouting grain fields and sometimes sod farms, and sparsely vegetated agricultural fields or pastures with flat topography (Zeiner et al. 1990).	<p>Low potential to occur due to the scarcity of suitable habitat and because the Permit Area is outside the known wintering range of the species. This species is not present in California during the summer.</p> <p>Database query: CNDDDB includes no records for this species within 7.0 miles of the Permit Area (CDFW 2013).</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: The known wintering range of this species in Tulare County occurs to the west of SR-99, and more than 10 miles</p>	No

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
				<p>from the Permit Area. This species does not nest in California. Permit Area nesting habitat: None.</p> <p>Permit Area foraging habitat: Agricultural or grassland land-cover types within the Permit Area may be suitable wintering habitat; however, since the eastern margin of this species' range occurs to the west of the Permit Area, there is likely low potential to forage in the Permit Area .</p> <p>Project specific survey results: Surveys were not conducted.</p>	
Nuttall's woodpecker	<i>Picoides nuttallii</i>	BCC/SA	Occurs in low-elevation oak and riparian woodlands, and in fall, migrates to pine-oak dominated woodlands below 1829 n (6000 ft.). Nests in cavities of live or dead trees or in dead limbs of cottonwoods, willows, sycamores, and oaks (Zeiner et al. 1990; Fix and Bezener 2000).	<p>Moderate potential to occur.</p> <p>Database query: CNDDDB does not track records of this species.</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Throughout Tulare County in suitable habitat. The Permit Area is within this species' range.</p> <p>On Permit Area nesting habitat: May nest in riparian and oak woodland habitats within or adjacent to the Permit Area.</p> <p>On Permit Area foraging habitat: May occur in riparian and oak woodland habitats within or adjacent to the Permit Area.</p> <p>Project specific survey results: Surveys were not conducted.</p>	Yes
Oak titmouse	<i>Baeolophus inornatus</i>	BCC/SA	Resident in a variety of wooded habitats, including montane hardwood-conifer, montane hardwood, a variety of oak woodlands, valley and foothill	<p>Low to moderate potential to occur.</p> <p>Database query: CNDDDB does not track records of this species.</p> <p>Service database query: Not identified on Service Species List</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
			riparian, and residential plantings (Zeiner et al. 1990; Fix and Bezener 2000).	<p>Range: In the project vicinity, mostly limited to the Sierra foothills. The Permit Area is within the range of this species.</p> <p>Permit Area nesting habitat: Some potential to nest in cavities in riparian and oak woodland habitats, in poles, and in fence posts within and adjacent to the Permit Area.</p> <p>Permit Area foraging habitat: Some potential to forage in riparian and oak woodland habitats within and adjacent to the Permit Area.</p> <p>Project specific survey results: Surveys were not conducted.</p>	
Oregon vesper sparrow	<i>Pooecetes gramineus affinis</i>	None/CSC (wintering)	Winter in California in grasslands, open ground with little vegetation, open brushlands, meadows, stubblefields, and road edges in valleys and desert regions (Zeiner et al. 1990; Shuford and Gardali 2008). Only the "Oregon" vesper sparrow is a CSC (. Of the two subspecies occurring in California (including the "Great Basin" vesper sparrow, <i>P. g. confinis</i>), the Oregon Basin vesper sparrow is probably the more common north of Kern County (Erickson 2008). However, this information is based on relatively sparse specimen data, as the two subspecies are not distinguishable in the field.	<p>High potential to occur.</p> <p>Database query: CNDDB does not track records of this subspecies (CDFW 2013).</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Includes the margins of the San Joaquin Valley, including the northeastern portion of the Permit Area (Erickson 2008). This subspecies does not nest in the project vicinity.</p> <p>Permit Area nesting habitat: None.</p> <p>Permit Area foraging habitat: Suitable foraging habitat is present in grassland and open ground areas with little vegetation, oak woodland, and idle agricultural fields.</p> <p>Project specific survey results: Surveys were not conducted.</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
Snowy plover (interior population)	<i>Charadrius nivosus</i>	BCC/CSC	<p>Interior birds generally summer along shorelines of alkaline lakes. Nests on bare ground or in sparsely vegetated flats and shorelines of variety of interior water bodies, within approximately 4 kilometers (2.5 miles) of surface water (Zeiner et al. 1990; Shuford and Gardali. 2008).</p> <p>During the winter, foraging habitat includes sandy beaches, sand spits and the dryer shoreline areas of tidal estuaries, bayshore sand flats, and salt evaporation ponds (Fix and Bezener 2000).</p>	<p>Low potential to occur, as the Permit Area is outside the known range of the species and includes limited suitable habitat.</p> <p>Database query: No CNDDB occurrences within 7 miles, with the nearest approximately 30 miles south southwest of the Permit Area (CDFW 2013). In addition, Shuford and Gardali (2008) noted an occurrence in 2003 in Lemoore, approximately 30 miles west of the Permit Area.</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: The known range in the San Joaquin Valley is west of State Route 99, on the valley floor and more than 10 miles west of the Permit Area.</p> <p>Permit Area nesting habitat: Some suitable habitat may occur around open water in the northwestern portion of the Permit Area.</p> <p>On Permit Area foraging habitat: Limited to small areas around open water along the northwestern portion of the Area.</p> <p>Project specific survey results: Surveys were not conducted.</p>	No
Swainson's hawk	<i>Buteo swainsoni</i>	None/ST	Forages in natural grassland land-cover, open fields, oak savannah, crop lands including alfalfa fields and suitable grain or low-growing row crops, pastures, and scattered tree groves in open country.. Nests in large, isolated trees and riparian systems near suitable foraging habitat (Zeiner et al. 1990;. Fix	<p>Low to moderate potential to occur.</p> <p>Database query: The nearest CNDDB occurrence, and the only one within 7.0 miles of the Permit Area, involves a nest 6.6 miles south of the Permit Area (CDFW 2013).</p> <p>Service database query: Not identified on Service Species List</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
			and Bezener 2000).	<p>Range: The Permit Area is located along the eastern margin of this species' range within the Central Valley.</p> <p>Permit Area nesting habitat: Suitable nesting habitat may occur in riparian areas along the St. John's River or Cottonwood Creek, as well as in isolated planted trees and tree clusters.</p> <p>Permit Area foraging habitat: Within and adjacent to the Permit Area, suitable foraging habitat includes row crops and fallow fields, irrigated pasture, and all grassland and other natural land-cover types east of the Friant-Kern Canal,</p> <p>Project specific survey results: Focused protocol level surveys in 2011 resulted in no observations of Swainson's hawks (Quad Knopf 2012b).</p>	
Tricolored blackbird	<i>Agelaius tricolor</i>	BCC/CSC (nesting colonies)	Occurs in fields, wetlands, and pastures. Nests in freshwater, emergent wetlands with tall, dense cattails or tules, and also in upland thickets of willow, blackberry, wild rose, and tall herbs. Forages on the ground in croplands, grassy fields, and flooded land, and along edges of ponds (Zeiner et al. 1990;. Fix and Bezener 2000).	<p>Moderate potential to nest. High potential to feed/forage in the Permit Area.</p> <p>Database query: CNDDDB includes no nesting occurrences of this species within 7.0 miles (home ranges are highly variable) of the Permit Area (CDFW 2013). The Tricolored Blackbird Portal (ICE and UCD 2012) includes a nesting location 1.4 miles south of the Permit Area, along Dry Creek, where a colony of 50 individuals was present in 2008.</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Resident throughout the San Joaquin Valley and the surrounding foothills. The Permit Area is within this species' range.</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
				<p>Permit Area nesting habitat: Wetland land-cover and agricultural land-cover, retention ponds with emergent vegetation, and patches of dense blackberry, willow, rose bushes near ditches or swales provide suitable habitat. However, no nesting locations have been located within the Permit Area.</p> <p>Permit Area foraging habitat: This species forages widely in non-native grasslands and croplands. Foraging areas are typically within a kilometer or two of colonies but not infrequently to six or more km.</p> <p>Project specific survey results: This species was not observed during general surveys conducted in the Permit Area.</p>	
Yellow warbler	<i>Setophaga petechia</i>	BCC/CSC	Summer breeding habitat includes lowland riparian woodlands, isolated willow stands, dry montane chaparral with scattered trees and montane coniferous forests with a brushy understory up to about 2743 m (9000 ft). Usually nest in the upright fork of a deciduous tree or a small shrub branch or sapling. Feeds on insects and spiders (Zeiner et al. 1990; Fix and Bezener 2000).	<p>Moderate potential to occur.</p> <p>Database query: CNDDDB includes no occurrences within 7.0 miles of the Permit Area, although this species is underrepresented in the database (CDFW 2013).</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Occurs in the Sierra Nevada foothills in Tulare County. The eastern terminus of the Permit Area is at the edge of the known current range (Heath 2008).</p> <p>Permit Area nesting habitat: Riparian vegetation along Cottonwood Creek and the St. John's River may provide suitable habitat.</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
				<p>Permit Area foraging habitat: Foraging habitat occurs in riparian vegetation where the species nests.</p> <p>Project specific survey results: No yellow warblers were detected here during surveys of riparian habitats in 2011 (Quad Knopf 2011c).</p>	
Yellow-breasted chat	<i>Icteria virens</i>	None/CSC	Occurs in dense riparian thickets of willow and other brushy tangles bordering watercourses, small ponds and swampy ground dominated by tangled vines, and lush low shrubbery interspersed by taller trees; and sometimes breeds in extensive hillside bramble patches. Bezener and Bishop (2005) found that this species requires a minimum width of 20 m of riparian habitat for breeding. Normally places nest in low dense shrubs or small trees near streams or rivers (Zeiner et al. 1990; Fix and Bezener 2000). Feeds mainly on small insects and spiders.	<p>Low potential to occur.</p> <p>Database query: CNDDDB includes no occurrences within 7.0 miles of the Permit Area (CDFW 2013).</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Occurs in the Sierra Nevada foothills in Tulare County. The Permit Area is within this species' range.</p> <p>Permit Area nesting habitat: Due to the lack of sufficiently wide and dense riparian areas along either the St. John's River or Cottonwood Creek, it is unlikely that suitable nesting habitat is present within or adjacent to the Permit Area.</p> <p>Permit Area foraging habitat: Foraging habitat occurs in riparian vegetation where this species nests. Due to the lack of sufficiently wide riparian areas within the Permit Area, suitable foraging habitat does not appear to be present within the Permit Area.</p> <p>Project specific survey results: No yellow-breasted chats were detected during general bird surveys conducted in riparian habitats in 2011 (Quad Knopf 2011c).</p>	No

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
Yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>	None/CSC (nesting colonies)	Nests in freshwater emergent wetlands with dense stands of tule, cattail, and bulrush and deep water; often found along borders of lakes or ponds. Water depth is an important parameter for successful nest sites, as deep water levels reduce the number and diversity of predators that have access to nests and controls vegetative cover and structure. Mean water depth at occupied nesting colonies in Manitoba ranged from about 29 to 38 cm (Zeiner et al. 1990; Fix and Bezener 2000; Shuford and Gardali 2008).	<p>Moderate potential to occur.</p> <p>Database query: CNDDDB includes no occurrences of this species (CDFW 2013).</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Occurs in the San Joaquin Valley portion of Tulare County, including the majority of the Permit Area (Jaramillo 2008). The Permit Area is within this species' range.</p> <p>Permit Area nesting habitat: Some potentially suitable nesting habitat consisting of deep water wetlands with emergent vegetation occur within the Permit Area.</p> <p>Permit Area foraging habitat: Wetland habitats, agricultural fields, and non-native grasslands within and adjacent to the Permit Area may be suitable for this species.</p> <p>Project specific survey results: Surveys were not conducted.</p>	Yes
<i>Mammals</i>					
American badger	<i>Taxidea taxus</i>	None/CSC	Species habitat includes many plant community types in California, but badgers are most common in annual grassland, savanna desert scrub, and mountain meadows near timberline. Requires sufficient food, friable soils, and relatively open, uncultivated ground (Williams 1986).	<p>Moderate potential to occur.</p> <p>Database query: CNDDDB query includes two occurrences from the same date and area, approximately 3.0 miles east of Permit Area, in 1994 (CDFW 2013). American badger use of home range varies with season and sex. Different areas of the home range are used more frequently at different seasons and usually are related to prey availability. Males generally have larger home ranges than females. According to Sargeant and Warner (1972), radiotransmitter-tagged American badgers had an average</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
				<p>annual home range of 2,100 acres (850 ha). The home range of one female was 1,790 acres (725 ha) in summer, 131 acres (53 ha) in fall, and 5 acres (2 ha) in winter.</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Occurs throughout Tulare County. The Permit Area is within the range of this species.</p> <p>Permit Area habitat: Non-native grassland, irrigated pasture, riparian , and oak woodland land-cover types provide suitable habitats for different parts of the species' life cycle.</p> <p>Project specific survey results: No badgers or badger sign were detected during surveys employing track stations, camera stations, spotlighting, and den searching in 2011 (Quad Knopf 2011b).</p>	
Pallid bat	<i>Antrozous pallidus</i>	None/CSC	Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings, preferably with access to open areas for foraging. Pallid bats forage for a variety of insects, including flightless arthropods picked up from the ground (<i>e.g.</i> , scorpions and ground crickets), insects gleaned from vegetation (<i>e.g.</i> , cicadas), insects taken in flight, and small vertebrates such as horned lizards and pocket mice that are taken on the ground. Although the species is capable of flying more than 18 miles, most foraging occurs within about two miles of the diurnal roost.	<p>Moderate potential to occur.</p> <p>Database query: CNDDDB includes one roost occurrence (15 adults, 15 juveniles) at a bridge crossing over the St. John's River 1.4 mi east of the Permit Area, from 2004 (CDFW 2013).</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Occurs throughout Tulare County, including the Permit Area.</p> <p>Permit Area habitat: May potentially roost in buildings in developed portions of the Permit Area and vicinity, and forage in non-native grasslands and open oak woodlands. Considered</p>	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
			Roosting sites are usually established in crevices or man-made structures, with colonies (Hermanson and O'Shea 1983). The selection of crevices may vary seasonally in relation to "adaptive hypothermia" in the species.	"absent" from Big Creek rebuild Permit Area, per Quad Knopf (2012a), based on lack of roosting habitat. Potentially suitable roosting habitat appears to be lacking along the east-west portion of the Permit Area. Project specific survey results: Surveys were not conducted.	
Tipton kangaroo rat	<i>Dipodomys nitratoides nitratoides</i>	FE/SE	Occurs in saltbush scrub and sink scrub communities in the Tulare Lake Basin of the southern San Joaquin Valley (Jameson and Peeters 1988).	Low potential to occur, as the Permit Area is outside the species' range and suitable habitat is absent. Database query: CNDDDB includes no occurrences within 7.0 miles of the project Permit Area (CDFW 2013). The nearest record in USFWS (1998b) is from approximately 12.0 miles south of the Project Permit Area, at the edge of the species' range. Service database query: Identified on Service Species List Range: Range is the eastern San Joaquin Valley north to southwestern Tulare County, south of the Permit Area. The Permit Area is within this species' range. Permit Area habitat: Suitable saltbush scrub and sink habitats are lacking within and adjacent to the Permit Area. Project specific survey results: Surveys were not conducted.	No
Western mastiff bat	<i>Eumops perotis californicus</i>	None/CSC	Occurs in open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees and tunnels. Forages high in the	Moderate potential to roost within the Permit Area, and if present, may forage above the Permit Area. Database query: CNDDDB includes 3 roost(?) records within 7.0 miles of the project Permit Area, including 2 approximately 2.5 miles south of the northeastern segment of the Permit Area	Yes

Table B-2
Wildlife Species with Potential to Occur in HCP Permit Area

Common Name	Scientific Name	Federal/ State Status	Habitat Associations	Status in Permit Area or Potential to Occur in Permit Area (now and over 30-year permit term)	To Be Addressed in EA?
			air (600-700 m [1970-2297 ft.]) usually over mesquite, where it catches strong flying insects such as dragonflies, moths, and beetles (Jameson and Peeters 1988).	<p>(CDFW 2013).</p> <p>Service database query: Not identified on Service Species List</p> <p>Range: Occurs in the Sierra Nevada foothills and eastern San Joaquin Valley portion of Tulare County, including the entire Permit Area.</p> <p>Permit Area habitat: A variety of habitats within and adjacent to the Permit Area are suitable for foraging, including non-native grasslands, oak woodlands, and riparian areas. Buildings and structures in the western portion of the Permit Area may provide suitable roosting habitat. Quad Knopf (2012a) also noted the presence of suitable habitat within the Permit Area.</p> <p>Project specific survey results: None were detected during acoustical monitoring along the St. John's River in the fall 2011 (Quad Knopf 2012a).</p>	

FEDERAL STATUS

FE: Federally Endangered; FT: Federally Threatened; FC: Federal Candidate Species; FD: Federally delisted; FPD: Federal Proposed for Delisting; FPE: Federally proposed for listing as Endangered; FPT: Federally proposed for listing as Threatened; FS: Forest Service sensitive; BLM: Bureau Land Mgmt sensitive; BCC: Bird of Conservation Concern

STATE STATUS

SE: California Endangered; ST: California Threatened; SCT: State candidate for listing as Threatened; SD: California delisted; SR: State Rare; CSC: California Species of Special Concern; FP: Fully Protected

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